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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,287	02/14/2001	Takashi Nomura	203253US6	8358

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
NGUYEN, STEVEN H D	
ART UNIT	**PAPER NUMBER**
2665	

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/782,287	NOMURA, TAKASHI	
	Examiner	Art Unit	
	Steven HD Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/28/05 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, lines 6-7; claim 10, line 6; claim 11, line 7; claim 12, lines 6-7, "the degree of non-coincidence between said first and second network" is vague and indefinite because it's unclear what it's constituted for. Please clarify, so the meter and boundary of the claims can be determined.

Regarding claims 1 and 10, lines 8-9; claim 11-12, lines 9-10, "control means for controlling the data transferred to the second network in accordance with ***a detection result provided by said detection means***" is vague and indefinite because it's unclear if the control means uses the result of degree of non-coincidence between said first and second network or

amount of data stored in said storage means or both the results. Please clarify, so the meter and boundary of the claims can be determined.

Regarding claims 13-16, "the detection result" is vague and indefinite because it's unclear if it includes the result of the amount of stored data. Please clarify, so the meter and boundary of the claims can be determined.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-2, 4-5, 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (USP 6542506) in view of Ramaswamy (USP 6888840).

Lee discloses a data transfer apparatus (Fig 4) for transferring data between a first network (Fig 4, ref 400) and a second network (Fig 4, ref 420), said data transfer apparatus comprising storage means for storing data separately for each data flow which has been received from said first network and which is to be transferred to said second network, the second network having a non-coincident bus cycle with respect to the first network (Fig 4, Ref 440 and Fig 5 for storing the received data according to each allocated area wherein ATM network and IEEE network has a different bus cycle with each other). However, Lee fails to disclose detecting means for detecting the degree of non-coincidence between said first and second network and amount of data stored in said storage means, for each data flow; and control means

for controlling said data transferred to said second network in accordance with a detection result provided by said detection means. In the same field of endeavor, Ramaswamy discloses detecting means for detecting the degree of non-coincidence between said first and second network (Fig 3 discloses a means for determining the degree different between the input clock and output clock, Tin - Tout) and amount of data stored in said storage means, for each data flow (Col. 5, lines 8 to col. 6, lines 24); and control means for controlling said data transferred to said second network in accordance with a detection result provided by said detection means (Col. 5, lines 8 to col. 6, lines 24; discloses if the buffer is full then increasing the output rate by increasing the output clock or deleting null packet to prevent overflow or if the buffer is empty, inserting null packet or decrease the output clock); when the amount of data stored in said storage means has become equal to or greater than a predetermined threshold value, said control means discards dummy data included in said data stored in said storage means (Col. 5, lines 19-32); when the amount of data stored in said storage means has become equal to or greater than a predetermined threshold value, said control means inserts dummy data into said data to be transferred to said second network (Col. 5, lines 40-53) and data is video data or audio data including a temporally continuous content (Col. 2, lines 4-17).

Since, it is well known in the art that two different type of bus network will have a different clock. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to apply a method and system for detecting the offset between the clocks of the network and amount of the stored data in order to control the output of the stored data according to the results as disclosed by Ramaswamy into Lee's system and method. The motivation would have been to reduce the cost of the system.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Ramaswamy as applied to claim 1 above, and further in view of Okuba (USP 5297139).

Regarding claim 3, Lee and Ramaswamy fail to disclose said control means starts reading said data from said storage means after the amount of data stored in said storage means has become equal to or greater than a predetennined threshold value. In the same field of endeavor, Okura discloses a method and system comprising a control means for starting to read the stored data from the buffer after the amount of data stored in the buffer is greater than a threshold (See col. 2, lines 28-44).

Since, a method and system for starting to read the stored data in the buffer when the amount of stored data in the buffer is full as comparing with a threshold is well known and expected in the MPEG2 art. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to apply a threshold to a system for using to compare this value with the amount of stored data in the buffer as disclosed by Okura's system and method into the system and method of Lee and Ramaswamy. The motivation would have been to prevent the buffer to be underflowed.

7. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Ramaswamy as applied to claim 1 above, and further in view of Robinet (US 20020131443).

Lee and Ramaswamy fail to disclose control means gradually corrects a deviation of a time stamp included in said data over a predetennined period of data units and the control means inserting or discarding the null packet a substantially middle point of said period of data units during which the time stamp is corrected. In the same field of endeavor, Robinett discloses gradually correcting a deviation of a time stamp included in the data over a predetermined period

of data units (paragraphs (0039) and (00401) and each transport packet containing a PCR is stamped with a receipt time stamp that is used to determine an actual dispatch time (paragraph (0137)); performing a final PCR correction as transport packets are outputted, so that the PCR in a transport packet is synchronized with the precise alignment of the transport packet in the outgoing stream (paragraph (0078)). Thus, the total period of time stamp correction extends from reception of a transport packet to the output of that transport packet. During this interval is when a null transport packet may be replaced with a data bearing transport packet (paragraph (0049)), thus meeting the definition of discarding dummy data at a substantially middle point of the period of the data units during which the time stamp is corrected.

Since, Ramaswamy suggests that a television signal must be transported at specific times or time interval in order to time stamp to be inserted into the packet stream to maintain accurate control of the display of the signal (See col. 6, lines 24-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to apply a method for correcting time stamp of the data units and inserting or discarding the null packets between the data units in order to correct the timing of data units as disclosed by Robinett into the method and system of Lee and Ramaswamy. The motivation would have been to obtain a quality signal at the receiving end.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Ramaswamy as applied to claim 1 above, and further in view of Saito (US 6,523,696).

Lee and Ramaswamy fail to disclose said first network is connected to another first network which is not synchronous in terms of a network clock with the former first network. In the same field of endeavor, Saito disclose an AV device (205) that connects a public network

(202) to an IEEE-1394 bus (203), representing the first and second networks, respectively, of the present invention. Saito also discloses that the public network (202) may also be connected to another IEEE-1394 bus (201), which represents another first network as in the present invention. Saito does not disclose that the ?EE-1394 bus (201) and the public network (202) are synchronized with respect to a network clock. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to connect the wide area network of Lee in view of Ramaswamy to another first network, specifically the IEEE-1394 bus (201) of Saito. One of ordinary skill in the art would have been motivated to do this so that a digital video user connected to the second network of Lee in view of Ramaswamy could receive a video stream from another digital video user on another network remotely connected to the first network of Lee in view of Ramaswamy.

9. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Ramaswamy as applied to claims 1 and 10-12 above, and further in view of Sato (USP 6128318).

Lee fails to disclose the detection result includes a determination as to a temporal difference between a bus cycle of a first network relative to a bus cycle of said second network. Ramaswamy discloses a method and system for determining the different between input clock and output clock for using to synchronize the clocks. However, Lee and Ramaswamy fails to disclose a method and system for determining the timing offset between the first and second network. In the same field of endeavor, Sato discloses a method and system for determining timer offset value between the first and second network (See Abstract and col. 5, lines 13-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to apply a method and system for determining a timer offset value between

the networks in order to synchronize their clocks as disclosed by Sato's method and system into the system and method of Lee and Ramaswamy. The motivation would have been to provide a quality signal at the receiving end.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lyons (USP 6330286) discloses a method and system for flow control, latency control and bit rate conversion in a timing correction and frame synchronization.

Fujimori EP 0841833) discloses a gateway for transferring ATM signal onto the IEEE-1394 bus.

Lyons (USP 6061399) discloses a system for synchronizing frames.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven HD Nguyen
Primary Examiner
Art Unit 2665
7/3/05